P. 1188

G.M 1916.

309 & 16.

SL.NO. 1-29.

P-87

Invention for Apparatus for Separating Liquids from Solids in fluid suspension by Dorr Company & Denver Co.

G IX-5]

s references.

File No. 309-16

1916-17
(G.M)

Serial Nos. 1-29

r references.

fm. 203-18(1-5)
G M 214-20(1-8)
pol 18-22
pol-18 22 —(1-3)

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 29

Part B for April 1918

SUBJECT.

Invention for Apparatus for separating liquids from solids in fluid suspensions' by the Dorr Company of Denver U S A

From
Messrs Kempson & Son Calcutta
Letter dt 23-9-16
Forwards an application for leave to file a specification of the above invention

To
Messrs Kempson & Son Calcutta
Letter no 13920 dt 9-4-1918
State that the filing date cannot be altered to 18th Dec; it, as the money was received on 6-2-1918

W D 1250—GPB—30,000 · 28-1-19

G. R. S. 11] 1916-17

GENERAL AND REVENUE SECRETARIAT.

(G. In.)

NOTES.

File No. 309-11

FILE HEADING.

Invention for 'Apparatus for separating liquids from Solids in fluid suspensions' by the Dorr Company of Denver U.S.A

From

Messrs Remfry & Son, Calcutta

No. Letter Dated 23.9.16 Received 27.9.16

Diary No. 3018	Enclos. 2	Spare Copies. -	Serial No. 1

BRIEF ABSTRACT OF LETTER.

Forward an application for leave to file the ~~above~~ specification of the above invention and a Power of Attorney executed by the applicants in their favour & ~~Request~~ State that the application ~~was~~ to be filed after the 16th Oct '16.

NOTES AND ORDERS.

2 From —do— Letter dt 6.10.16

Advises remittance of Rs 11/- being the application & other fees in respect of the above invention & requests that the application forwarded with the above may be filed on or after the 16th October 1916.

NOTES—First Sheet.

3018
3856

G. R. S. 12]

General and Revenue Secretariat. | File No. 309 of 1916.

Serial No.	
	1. The application was received on the 27th September 1916 & the fees in respect of it on the 5th instant. Messrs Remfry & Son request that the application may be filed on or after the 10th Oct 1916.
E	2. Section 12(2) of the Mysore Inventions & Designs Regn. provides that such applications be dated in the Register of Inventions maintained in this office as of the day of their delivery or receipt.
	3. Submitted for orders. Needs 23/10/16 Deputy Mg Dir
	4. The date may be adopted U/24/10/16
	5. In paragraph 1 of the above application it is stated that the applicants are the assignees of the Inventor of the invention in question. But no deed of assignment has been received.
	6. Submitted with a draft. Needs 24.11.16 7 Done U/25/11/16
3	To: Messrs Ramfry & sons Calcutta: No: 4.651 With ref: to col 1, states that the application has to be dated in the Register of Inventions maintained in this office & requests that the deed of assignment executed by the inventor may be obtained & forwarded.
4	From —do— Letter dt 1.12.16 States that the Deed of Assignment referred to in the

NOTE—Contn. sheet.

GPB—70,000—17-12-15

3296/4915/6184

(3)

G. R. S. 12]

General and Revenue Secretariat. | Fin. File No. 309 of 1916.

Serial No.

has been called for and will be forwarded in due Course & adds that the application should ~~bear~~ for reasons given bear filing date 9.10.16 instead of 27.9.16.

8. According to section 12(2) of the Inventions & Designs Regulation the date of receipt of the application viz 27.9.16 (~~was to be regarded~~ has been adopted) as the date of its filing. (Vide paragraph 4 supra)

9. Messrs Remfry & Son contend that the date of receipt of the application fee in respect of the invention viz 9.10.16 should be regarded as the filing date of the application, under Sec 47(4). This section provides that "a proceeding in respect of which a fee is payable under the IV Schedule shall be of no effect unless the fee has been paid."

Submtd for orders

13/12/16

Ldrs

X May be agreed to

W 30/12/16

5 From Messrs Remfry & Son Calcutta Letter dy 10.1.17

In continuation of the above forwards a deed of Assignment in respect of the said invention & advises remittance of as. 8/- being the stamp fee on the document.

Drafts Subtd. The application fee will be separately remitted to Treasury in challan form

25/1/16

W 22/1/17

NOTE—Contn. sheet.

GPB—70,000—17-12-15

6184/6712

WD 1233—GPB—60,000—1-12-16—S.

(4

G. R. S. III-2]

General and Revenue Secretariat. | Gen File No. 309 of 1916.

Serial No.	
6	To the Supdt of Stamps. G. 10192 D 25-1-17. Forwards a sum of Rs 1/8. and the deed of Assignment referred to in Sl 5 and the power of Attorney referred to in Sl 1, and requests that the deed of Assignment & the Power of Attorney may be impressed with the Mysore Rev. Stamp of the Value of Rupees eight & Rupees one respectively & returned to him.
7.	To the D. G. of Education. & G. 10193 D 25-1-17 Forwards the application referred to in Sl 1 and requests that the opinion of Mr E.R. Metcalfe B.Sc Professor of Physics, Central College may be obtained thereon & forwarded to this office.
8	From the Supdt of Stamps No. I.S 204 & 27-1-17 Returns the documents sent with Sl. 6 above duly stamped with Sl 4 of Rs 4 as 8 as 16 & requests acknowledgment. Draft acknowledgment submitted Issued 10/2/17 10/2/17
9	From the Treasury Officer Bangalore Dt Treasury Receipt & 22/1/17 Acknowledgment for the amount of fees received from the applicant & remitted to the Treasury

NOTE—Contn. sheet.

6712/6470 7863 7938

WD 1233—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat. | G. M. File No. 309. of 1916.

Serial No.

10 To

The Supt. of Stamps.

G. M103 dy 15.2.17.

Acknowledges the receipt of the powers of Attorney sent with Sl. 8.

fwd Sl 7.

11 From Messrs Remfry & Son Letter dy 1.3.17

Forwards amended pages 13 & 14 and requests that they may be substituted for pages 13 & 14 in the application forwarded with Sl 1 supra & that leave to file Specification may be granted upon the application as so amended.

12 From the Dy. of Education No. 20574/830 dy 27.2-17

Submits a copy of letter from Mr. Metcalfe regarding the application of the Dorr Co. of Denver forwarded with Sl. 7 above.

The amended pages received with Sl 11 if substituted do not give a cubic inch to the application.

Draft Subtd

Issued 4/3/17

Kale 2/3/17

13 To Messrs Ramsay & son - Calcutta

No. G. 12319 dy 13.3.17

Returns both the applications & the amended pages 13 & 14 & requests to forward a revised application.

Ltr D

NOTE—Contn. sheet.

7938
8444
30-9-17

WD 1233—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat.

For File No. 309 of 1916.

Serial No.	
14	From Messrs Remfry & Son Letter dt 19.3.17 With reference to the above states that the new pages 13 & 14 may be inserted before the 'Claims in the Application' instead of. Such pages may be substituted for pages 13 & 14 in the application as mentioned in their letter dt 1.3.17 & 11 above. Draft Subtd. Recte 26/3/17 VS Submd 4/3/17
15	To, D.G. The D. G. of Education No. 1370/ dt 9/4/17 With ref: to SL12, retransmits the application with two new pages 13 & 14 & requests that the further opinion of Mr. E. P. Metcalfe may be obtained & forwarded to this office.
16	From the Dy. Dir. of Education No. 10847 dt 11-10-17 Forwards copy of letter from Mr. Metcalfe giving his opinion on the ~~fact~~ above invention. The expert opinion is favourable Draft Subtd Recte 12/11/17 VS Draft may be approved 14/11/17 Submd 16.11

Expedite Avoid delays in future 22/9/17

267.
14.11.17.

NOTE—Contn. sheet.

(7

309/4596

WD 1233—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat. | For File No. 309 of 1916.

Serial No.	
17	G.O. No. G.6913 & 24.11.17 Authorizes the Dorr Co. of Denver to file a Specification of the above said invention
18	To Messrs Remfry & Sn No. G.6914 & 24.11.17 Forwards the above for communication to the parties Concerned.
19	From Messrs. Remfry & Son Calcutta Letter & 15.12.17 Forwards 4 Copies of the Specification of the above invention & request that it may be filed also advise remittance of Rs. 30/- being the fees for the same. To the Cash Section for kind noting if the amount has been received Recd 22/12/17
20	To Messrs Remfry & Son — No. G.8982 & 3.1.18 Intimates that the fee has not been received
21	From —do— Letter & 7.1.18 States that they remitted the fee by money order No. 6708 & 15.12.17.
22	To —do— No. G.10408 & 29.1.18 States that the money order has not been received & that the post master Bangalore, inspite of the said No cannot be traced as having been received & paid.

GEN. & REV. SECRETARIAT. V GENERAL 2 JAN 1918

NOTE—Contn. sheet.

4596
5277
6261

ND 1283—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat.

For File No. 309 of 1916.

Serial No. 23

From Messrs Remfry & Sons Letter dt 4.2.18

Advise remittance of the fee of Rs. 307 by a fresh money order & requests that the Specification may be taken as filed on 18/12/17 the date on which it was received in this office.

Copies of the Specification were received on the 18th Dec^r 17. The fee said to have been remitted by them not having been received in this office on that date, they have made a fresh remittance which ~~has been~~ was received here on the 8th Feb 18.

The Specification has, however, been filed within 6 months from the date of Rs. authorizing the filing of the Specification viz 24.11.1917.

Section 47(4) of the Mysore Inventions & Designs Regulation provides that "A Proceedings in respect of which a fee is payable under the fourth Schedule shall be of no effect unless the fee has been paid.

Orders are solicited as regards the filing date.

13/2/18

The date on which the money was received should be treated as the filing date. 14/2/18

NOTE—Contn. sheet.

(9

6261

WD 1233—GPB—60,000—1-12-16—S.

G. R. S. III-2]

General and Revenue Secretariat. | Fm File No. 309 of 1916

Serial No.	
	Three drafts Subtd The certificate at the foot of the fo may be kindly initialled. The fee received will be separately remitted to the Dy. Recd 15/2/18 Issue 16/2/18
24	To. The Compiler, Mysore Gazette. G. 11872 of 26.2.18 Notifies that the specification of the above invention has been filed and that it is open to inspection at the Secrt. on payment of a fee of Re 1/-.
25	To messrs. Rembry & Son. G. 11873 of 26.2.18 Fds a copy of the above Notification and returns the Go. with the certificate duly filled in and signed.
26	To. The Supdt., Govt. Museum " Chief Engineer in Mysore " Dy. of Edn. G. 11874-6 of 26.2.18. Fds. Copies of the specification for record in their Offices.

NOTE—Contn. sheet.

G. R. S. 12]
General and Revenue Secretariat.

6261/6774/6984/10-23

(10

File No. 309 of 1918

Serial No.	
27	From Messrs Remfry & Son Letter dt 20-2-18 Referring to sl 23 above request that the Specifications should be accorded filing date 18-12-17 being the date on which the specifications were received in this office. The date of receipt of the fee viz 8-2-18 has been treated under the rules as the filing date & orders have accordingly issued. No action on the present reference seems necessary. Submd 28/2/18 U/Sgs/18
	Remfry remitted to Treasury Rs 1-0
28	From Messrs Remfry & Son Calcutta Letter dt 25-2-18 In continuation of sl 27 forwards a certificate from the Presidency Post Master, Calcutta, dt 23-2-18 certifying that the sum of Rs 90/-, including the fee for filing specifications in this matter, was remitted by them to this office on 15-12-17 and that the default in payment was not due to any fault on their part & requests that these specifications may be granted filing date 18-12-17.
29@	From the Treasury Officer State Huzur Treasury Rs 87 dt 4-3-18 Acknowledges receipt of 30/- being the fees for filing the above sl 28. Submd with a draft reply 5/3/18 Under what provision of law has the request been made? U/6/3/18

NOTE—Contn. sheet.

GPB—50,000—12-8-10

7023

G. R. S. 12]
General and Revenue Secretariat.

For File No. 309 of 1916

Serial No.

Subtd

The request is not covered by the Regulation

7/8/18

The Deputy may be approved. The last Memorandum says that the view expressed in it is correct.

2nd Member 11/1/4/18

11/2/4/18

29 To

Messrs Remfry & Sons, Calcutta.

G. 13920 dt 9.4.18

With refce to 2S- states that the date on which the fees in respect of filing the specification were received on 8th Feb. 18 which has been treated as the filing date of your request to consider 18th Dec. 17 as the filing date is inadmissible

B in G. M. file

30.
1.4.18.

CHIEF SECRETARIAT
IV
MINOR Depts.
27 JAN 1919

NOTE—Contn. sheet.

GPB—50,000—12-8-10

8018 (12

1916-1917

Gen 307-11-1

To REGISTERED.

THE ~~CONTROLLER OF PATENTS~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE~~, GENL. & REV. DEPTS.,
~~CALCUTTA~~. BANGALORE,
MYSORE.

FROM REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 23rd September 1916.

SIR,

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats.(Genl)			

re THE DORR CO. (MYSORE)

No. *dated*

We have the honour to forward herewith an Application of THE DORR COMPANY, a Corporation organized under the Laws of the State of Delaware, and doing business at 1009 Seventeenth Street, in the City of Denver, County of Denver, State of Colorado, United State of America, Engineers, for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulation, 1894, in respect of an Invention for "APPARATUS FOR SEPARATING "LIQUIDS FROM SOLIDS IN FLUID SUSPENSIONS",

A Power of Attorney under which we are acting is also enclosed.

Our instructions in this matter are to file this Application on 10/10/16 or on the earliest possible date thereafter & we are therefore submitting the papers without the prescribed Fees & solicit the favour of your informing us whether Filing Date 10/10/16 can be secured for this Application & if not the earliest date thereafter which can be secured as the Filing Date. On receipt of this information, we will remit the prescribed Fee of Rs. 11/-, being Application filing Fee Rs. 10/- & Stamp Duty on Power of Attorney Re. 1/-.

We have the honour to be,
Sir,
Your very obedient servants,
Remfry & Son

MYSORE APPLICATION.

N.B.- We request you to note that this Application is not submitted by us for filing at present & that such Application is not to be filed before 10/10/16.

P/O (Genl.) 1,000—4-2 L.M.B. [37-3-11]

GOVERNMENT OF MYSORE
27 JN 17
8
ANNAS

(13

A S S I G N M E N T.

WHEREAS I, ALFRED LESLIE BLOMFIELD, Mining Engineer, of No. 812 Cooper Building, City of Denver, County of Denver, State of Colorado, United States of America, am in possession of an Invention for Improvements in Apparatus for Separating Liquids from Solids in Fluid Suspensions: Now therefore know ye that for an in consideration of the sum of five shillings to me in hand paid, the receipt of which is hereby acknowledged, I, the said ALFRED BLOMFIELD, have assigned and transferred and by these presents do assign and transfer unto THE DORR COMPANY, a corporation organized under the laws of the State of Delaware, and doing business at 1009 Seventeenth Street, City of Denver, County of Denver, State of Colorado, United States of America, Engineers, its heirs, executors, administrators and assigns (hereinafter called "the said Assignee") the whole right, title and interest in and to Letters Patent to be obtained for the said invention from the Government of Mysore the same to be held and enjoyed by the said Assignee to the end of the term or period for which such Letters Patent may be granted, or any prolongation or extension thereof, as fully and entirely as the same could have been held and enjoyed by me had this Assignment not been made.

IN WITNESS whereof I, the said ALFRED LESLIE BLOMFIELD, have hereunto set my hand and seal this Thirteenth day of November 1916.

Alfred Leslie Blomfield

Signed, Sealed and
delivered at
in the presence of

Grace M. Palmer
1144 Pearl St. Denver Colo. U.S.A.
Bookkeeper.

Pauline Bartlett
Clerk
108 16th Street
Denver, Colorado, U.S.A.

PATENT AGENTS
SOLICITORS
CALCUTTA

(14

POWER OF ATTORNEY.

In the matter of the Inventions and Designs Regulation, 1894, of the Government of Mysore and in the matter of THE DORR COMPANY, a Corporation organized under the Laws of the State of Delaware, and doing business at 1009 Seventeenth Street, in the City of Denver, County of Denver, State of Colorado, United State of America, Engineers.

We, the abovenamed The Dorr Company do hereby retain, constitute and appoint the Partners or Partner or Representatives or representative for the time being of the firm of REMERY & SON, Solicitors, Calcutta, British India, as our Agents and Attorneys to apply for and obtain from the Government of Mysore and keep in force an Exclusive Privilege or Letters Patent for "Apparatus for Separating Liquids from Solids in Fluid Suspensions" and we authorise them or either of them to sign our name to such papers and writings and do such acts regarding the same, including the appointment of a substitute or substitutes, as may be necessary or expedient.

Dated this 8th day of July.

191 6.

SIGNED, SEALED and
DELIVERED AT
in the presence of

The Dorr Company.
By Edwin Compton Reybold
Secretary.

Nela Louise Rhoades
642 High Street Denver Colorado
U.S.A. - Stenographer

Franklin Robert Kacher
1430 Tremont St,
U.S.A. - Stenographer

A P P L I C A T I O N.

TO THE DEWAN OF MYSORE.

The application of The Dorr Company, a corporation organized under the laws of the State of Delaware, and doing business at 1009 Seventeenth Street, in the City of Denver, County of Denver, State of Colorado, United States of America, Engineers,

for leave to file a Specification under Part I of the Mysore Inventions and Designs Regulation, 1894.

1. The applicant is in possession of an Invention for Apparatus for Separating Liquids from Solids in Fluid Suspensions, he is the assignee of the Inventor thereof; and, to the best of his information and belief, the Invention is new within the meaning of Part I of the Inventions and Designs Regulation, 1894, and no circumstance exists which, if the Applicant is authorised to file a Specification and files it in accordance with that Part, will disentitle him to an Exclusive Privilege thereunder in respect of the Invention.

The Applicant has not applied for a Patent in the United Kingdom in respect of this Invention.

The Applicant has not applied for a Patent in British India in respect of this Invention.

2. The following is a description of the Invention:

Ser No 1-16

This invention relates to apparatus for separating liquid from solids in a fluid suspension of solids in liquid, and more particularly to apparatus for dividing solids from material, by what is commonly known as the continuous gravity settling process.

In this process, the solid constituents of the material settle out of the liquid in which they are suspended, in a container provided with an outlet for the settling solids in a thickened condition, and with an overflow for clear liquid rising out of the thickened matter.

In the operation of apparatus of this character, it is essential that the settling solids thickened to a predetermined, regulatable degree of density, and the clear liquid rising out of the subsiding matter, are separately and continuously discharged from the tank or vessel in which the separation process is carried on.

The primary object of the present invention is to provide in apparatus of the hereinbefore briefly described type, an association of devices which by synchronous treatment of separated quantities of material, multiplies the settling capacity of the apparatus without the use of separate containers, elevators or other conveying devices, and with but little increase in the mechanical energy required to singly operate an apparatus of ordinary settling capacity.

With the above and other objects in view, all of which will be fully disclosed in the course of the following description, the invention consists in combining in a single unit a series of separated settling areas designed to co-

operate in the treatment of pulpous material, to extract the liquid constituents thereof and recover the solid matter in a thickened condition.

In the accompanying drawings have been illustrated different forms of apparatus for accomplishing the object of the invention, all based upon one principle and operating to produce by equivalent actions, one and the same result.

Essentially, the invention consists of a tank having a succession of superposed settling areas, means for feeding material to said areas, means for discharging the solids settling upon the areas in a thickened condition, and means for the automatic discharge of clear liquid rising out of the settling solids above each settling area.

In association with the above enumerated essential features, the invention comprises devices for regulating the feed of material to the different settling surfaces, by varying the volume of the discharge of clear liquid from above the same, means for regulating and restricting the discharge of the thickened matter, mechanism for moving the settling solids to the points of their discharge, and means to automatically proportionate the quantities of material between the settling surfaces.

The invention furthermore contemplates the automatic distribution of material to the different settling zones proportionate to the discharge of clear liquid from above the same, and the regulatable and restricted discharge of the thickened matter from the tank either at separate points or through one common outlet.

It will be seen from the foregoing brief description of the invention that by its use the capacity of settling apparatus of the type mentioned is materially increased with a comparatively small advance in the cost of operation and without enlarging the superficial area of the container in which the process is carried on.

In the drawings in the various views of which like parts are similarly designated,

Figure 1 represents a vertical section through a separating apparatus embodying improvements in a form in which the material is fed from a common source of supply separately to different settling areas, and in which the thickened material is discharged from the series of settling surfaces at different points exteriorly of the tank;

Figure 2 is a similar section showing a form of the invention in which the material fed at one point of the apparatus is automatically distributed to the different settling zones and the thickened matter discharged from the series of settling surfaces is removed from the tank through a single outlet;

Figure 3 is a similar section of the apparatus showing a modification of the form illustrated in Figure 2, in which means are provided to retain the thickened matter upon the settling surfaces;

Figure 4 is a section of the apparatus illustrating a modification of the construction shown in Figure 3

Figure 5 is a central section through the apparatus showing an improved means for directing the

thickened solids discharged from an upper surface to an outlet communicating with the lowermost settling area of the series;

Figure 6 is a transverse section of the apparatus taken along the line 6-6, Figure 4;

Figure 7 is an enlarged sectional detail view of the valves included in the means for automatically replenishing the quantity of material beneath one of the settling surfaces in case it is diminished below a predetermined degree;

Figure 8 is a section along the line 8-8, Figure 7

Figure 9 is a sectional view showing a modified method of regulating the discharge of clear liquid from beneath the settling surfaces of the apparatus, and

Figure 10 is a fragmentary sectional view showing another modification of the restricting means illustrated in Figure 3.

Referring first to Figure 1 of the drawings, the reference character 2 designates a preferably cylindrical tank which in its substantially flat bottom has a conical sump 3 which provides an approach to an outlet-conduit 4 the flow through which is controlled by a valve 5.

Disposed transversely of the tank in connection with the inner circumferential surface of the same, are one or more partitions or decks 6 which provide settling surfaces supplemental to the lowermost surface established by the bottom of the vessel.

The partitions shown in the drawings are dished to accelerate the movement of the settling solids toward

their outlets and to form pockets in which the clear liquid, rising from the solids settling beneath the partitions, accumulates. However, the partitions may be level or made in any other suitable form and any desired number of partitions may be used within the limits of the tank.

A peripheral launder 7 disposed adjacent the top of the tank is provided for the overflow of clear liquid rising from solids settling toward the uppermost settling surface and conduits 8, connected with the tank at points subjacent the decks, serve for the outflow of clear liquid rising from the solid matter settling in the spaces of the tank beneath the same.

The overflow launder discharges by means of a pipe 9 into a trough 10 placed exteriorly of the tank, and the conduits 8 are preferably bent upwardly to deliver the liquid rising therein into the same trough.

The static heads provided by the conduits 8 may be varied to regulate the feed onto the different settling surfaces of the tank in accordance with the discharge of clear liquid from above the same. This variation may be accomplished by the application of different devices, the simplest and in many respects most practical being illustrated in Figure 3.

In this construction the pipes 8 extending through openings in the bottom of the trough 10 are surmounted by series of flat rings 40 placed loosely one upon another in axial alinement. It will be seen that by removing one or more of these rings, or by adding to their number, the elevation of the egress opening of the conduit, and the static head produced thereby, may be varied to any desired degree.

The static head may also be varied and the outflow of liquid from the tank correspondingly accelerated or retarded by adjusting the length of the pipes 8 by the use of a sleeve which, as shown at 13 in Figure 9, is slidably mounted upon the upper end of the pipe 8 in longitudinal alinement therewith.

The flow through the pipes 8 may also be regulated by means of ordinary two-way valves 12 placed at any convenient point of the pipes exteriorly of the container.

The fluid-suspensions are fed to the tank separately at points above the different settling surfaces, through pipes 14 which connect with a common source of supply 15, and the thickened matter settling toward the decks is discharged therefrom adjacent the center of the tank and conducted to points exteriorly of the same, through pipes 16 the flow through which may be readily regulated by adjustment of sliding valves 17.

The movement of the thickened matter along the different settling surfaces toward the respective discharge openings, is assisted by a series of sweeps 18 disposed above the said surfaces in connection with a shaft 19 which imparts a slow rotary movement thereto.

The shaft whose axis is coincident with that of the tank, is suspended in bearings 20 and connected at its upper end with a suitable driving mechanism through the intermediary of gears 21.

Stuffing boxes 22 or other suitable means provide fluid-tight passages for the shaft through the decks 6.

The sweeps are preferably composed of radially extending arms provided with obliquely disposed blades

which direct the material toward the center of the tank; they are mounted on the shaft by means of collars 23 and they are adjustably suspended in an inclined position by rods 24 provided with turnbuckles for their longitudinal extension or contraction.

In order to automatically equalize the pressure above and below the decks, in case the quantity of material beneath the same is by scant supply lessened to the extent that the decks are supported insufficiently to bear the weight of the settling solids, the following device is employed.

Conduits 25 separately connecting the compartments of the tank beneath the decks with the space above the upper deck, are controlled by two oppositely moving flap-valves 26 shown in detail in Figures 7 and 8.

The valves are disposed on oppositely slanting seats in compartments of a housing 27 which connects the respective conduit with the interior of the tank.

When the pressure beneath one of the decks diminishes, the material contained in the tank above the upper deck will flow past the outwardly opening valve through the conduit until the pressures above and below the deck are equalized, or in case by an oversupply of material the pressure beneath one of the decks should exceed that above the upper deck, the excess material is permitted to flow upwardly through the pipe and past the inwardly opening valve into the upper portion of the tank

The automatic regulation of pressures in the tank may be accomplished in many different ways, and the above-described device is merely an illustration of a simple method of attaining this object.

In the operation of a settling apparatus of the construction hereinabove described the material is fed in predetermined quantities through the conduits 14 into the different compartments into which the tank is divided by the transverse partitions.

While the solids suspended in the liquid of the fluid-suspensions settle upon the surfaces provided by the bottom of the tank and the superposed decks of the same, the clear liquid rises in the upper compartment to a level with the overflow launder 7 and in the other compartments into the pockets 28 formed beneath the decks above the same

The clear liquid accumulating in the spaces immediately below the decks is discharged into the trough 10 through the respective conduits 8. the flow through which is controlled either by increasing or diminishing the number of rings 40 shown in Figure 3, or by adjusting the valves 12 or the adjustable sleeve 13 shown in Figure 9, or by whatever other means may be employed for varying the static head.

The continuously revolving sweeps promote the uniform movement of thickened matter settling toward the different surfaces, to the respective outlets and through the conduit 16 connecting therewith, it being understood that the degree of density at which this matter is discharged is regulated by adjustment of the valves 17 which control the flow through the said conduit, and that the rate at which the material is fed into the spaces beneath the decks is determined by accelerating or retarding the outflow of liquid through the overflow pipes 8 in the manner hereinbefore explained.

In the form of the invention shown in Figure 2, the decks are provided with central openings 29 through which material may flow from one compartment to another. The material is in this instance supplied above the upper deck through one or more feeds 30 and passes through the openings 29 into the other compartments of the tank. The solids settling toward the surfaces provided by the bottom of the tank and the superposed decks are in a thickened condition removed through the respective openings by action of the sweeps and accumulate in the bottom portion of the tank from where they are discharged through the valve-controlled outlet 4.

The clear liquid rising out of the solids subsiding toward the different settling surfaces, is, as in the first described form of the invention, discharged through adjustable pipes, while the liquid rising above the upper deck overflows into the peripheral launder at the edge of the tank.

In the construction illustrated in Figure 3, the central openings of the decks are surrounded by boots or collars 31 extending upwardly from the decks for the purpose of retaining the settling material upon the surfaces of the same and thereby assuring the discharge at a predetermined uniform degree of density.

The thickened matter is in this instance removed separately from the different decks, as in the first-described form, through conduits provided with valves for the purpose of restricting the discharge.

The pulp passes from a feed-box, disposed as in the form shown in Figure 2, through the collars 31 into the different compartments beneath the upper deck.

The clear liquid overflows as in the other forms of the apparatus, and the sweeps are in this instance connected with the shaft by means of yokes 32 which straddle the collars of the respective decks.

The form of the invention illustrated in Figure 5 is identical to that shown in Figure 3 with the exception that the thickened matter instead of being removed from the decks at different points of discharge exteriorly of the tank, is conducted to the bottom-portion of the tank from which it is discharged through the central valve-controlled conduit 4.

To accomplish this result without undue mixing of the thickened matter with the material constantly supplied to the different compartments of the tank through the collars on the decks, a channel 33 is attached concentrically to the shaft or to the sweeps connected therewith, above the bottom surface of the tank, and the discharge conduit connected with the superposed settling surface, projects into the said channel instead of extending exteriorly of the tank, the valve by which the discharge through said conduit is regulated having its stem extended to a point without the tank for facilitating its adjustment.

In the construction of the invention illustrated in Figure 4, means have been provided to restrict the discharge of thickened matter from the upper settling surfaces in tanks in which the thickened matter is conducted from the different decks to the bottom-portion of the tank for their discharge through a single central outlet.

The retarding means above referred to consist of an open-ended mantle 34 which is mounted for rotation with the shaft, around the collar surrounding the opening 29

and in spaced relation to the collar and the surface of the respective deck.

In the operation of the apparatus, only the lowermost strata of the thickened matter settling upon the surface of the deck will pass through the collar into the subjacent compartment of the tank, since it is compelled to flow through the space beneath the mantle into the space between the latter and the collar, and thence to a point of overflow at the upper edge of the collar.

To prevent mixing of the thickened matter passing through the collar, with the material which is constantly fed through the same into the lower compartments, a conduit 35 extending longitudinally within the collar is connected with an overflow port adjacent the upper edge of the same.

In the construction shown in Figure 10, the collar 31 extends downwardly below the upper settling surface, its principal purpose being to restrict the downflow of material into the space above the lower surface. by frictional contact and thereby obtain a wider range of regulation by the outflow of clear liquid.

The improved thickening apparatus has been described in its preferred formsbut variations in the construction and relative arrangement of the several parts, other than those set forth in the foregoing description, may be resorted to without departing from the principle of the invention and within the scope of the claims.

A settling tank constructed in accordance with the present invention with two or more settling surfaces, provides an efficient substitute for the series of tanks used heretofore to progressively thicken a charge of material in distinctive stages and it is advantageous over this method of progressive thickening in that the materials immediately upon settling on the decks of the compartments into which the tank is divided are by the action of the sweeps moved to the respective discharge openings and thence to the openings in the bottom of the tank through which the final product is discharged.

It has been found in practice that the thickened product, which in the form of the invention shown in Figure 3 falls by its specific gravity from the discharge opening of each deck to the bottom of the container, does not mix to any serious extent with the thinner material through which it passes.

It has also been found that the gentle stirring action of the sweeps expedites the thickening process and increases the density of the final product and while the openings in the decks which connect the different compartments are provided primarily for the passage of downwardly moving material from one to the other, it also serves as a conduit for upwardly flowing thin material, it having been found that, as stated hereinbefore, pulps of different densities have little tendency to mix.

From the above statements based upon actual demonstrations it will be understood that by proper proportioning of the different openings through which the material passes in the operation of the settling tank, the overflow conduits which connect the compartments

below the upper deck, may be eliminated in which case the liquid flowing upwardly from each compartment through the passages in the decks, enters the space of the tank above the upper deck and is discharged therefrom across the overflow at the upper edge of the container.

The term "clear liquid" used in the present specification is to be understood to be only a relative term as it has been found in practice that the liquid which leaves at the top of the compartments or which enters the overflow launder generally carries fine matter in suspension.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:

1. In an apparatus for thickening the solids from fluid suspensions, a settling tank, upper and lower settling surfaces therein, means for the outflow of clear liquid rising from solids settling toward said surfaces, an outlet for the discharge of thickened matter from the lower surface and an outlet for discharging thickened matter from the upper surface, means, such as sweeps, having a movement above said surfaces being preferably provided to impel the thickened matter toward the respective outlets.

2. An apparatus according to claim 1, in which the upper settling surface adjoins the circumferential wall of the tank.

3. An apparatus according to claim 2 in which the material is fed separately into the spaces of the tank above the two surfaces.

4. An apparatus according to claim 3 in which means are provided to automatically regulate the pressure above and below the upper surface according to a predetermined ratio.

5. An apparatus according to claim 1 in which means are provided for accelerating or retarding the flow of clear liquid discharged from the space above the lower settling surface.

6. An apparatus according to claim 5 in which the flow of clear liquid is accelerated or retarded by varying the static head produced by the outlet conduit for the liquid.

7. An apparatus according to claim 1 having a regulatable outlet for the discharge of thickened matter from the lower surface and a regulatable outlet for discharging thickened matter from the upper surface.

8. An apparatus according to claim 7 in which the thickened matter from the upper surface discharges through the outlet onto the lower surface.

9. An apparatus according to claim 8 having a channel to receive the matter discharged through the outlet of the upper surface and conduct it to the lower surface.

10. An apparatus according to claim 1 in which the upper surface has an opening for the flow of material fed into the tank above the same into the space above the lower surface.

11. An apparatus, according to claim 10 in which means, such as a collar, are provided for restraining material settling toward the upper surface from passing through the opening in the upper surface.

12. An apparatus according to claims 1 or 10 in which means are provided for restricting the discharge of settling matter from the surfaces.

13. An apparatus according to claims 11 and 12 in which the restricting means consists of a mantle spaced from the collar and the opening in the upper surface.

14. An apparatus according to claim 13 in which material rising in the space between the collar and the mantle is delivered into the space beneath the upper surface by means of a conduit connected with a port in the collar.

15. The apparatus for thickening the solids from fluid suspensions substantially as described or substantially as illustrated in the drawings.

3. The Applicant, therefore applies for leave to file a Specification of the Invention pursuant to Part I of the Inventions and Designs Regulation, 1894.

The Door Company
By Edwin Compton Reybold
Secretary.

We, the Applicants abovenamed, do declare that the facts stated in this Application are true to our knowledge, except as to matters stated on information and belief, and as to those matters we believe them to be true.

Dated this 8th day of July 1916.

The Door Company
By Edwin Compton Reybold
Secretary.

Lela Louise Rhoades

Franklin Robert Kachel.

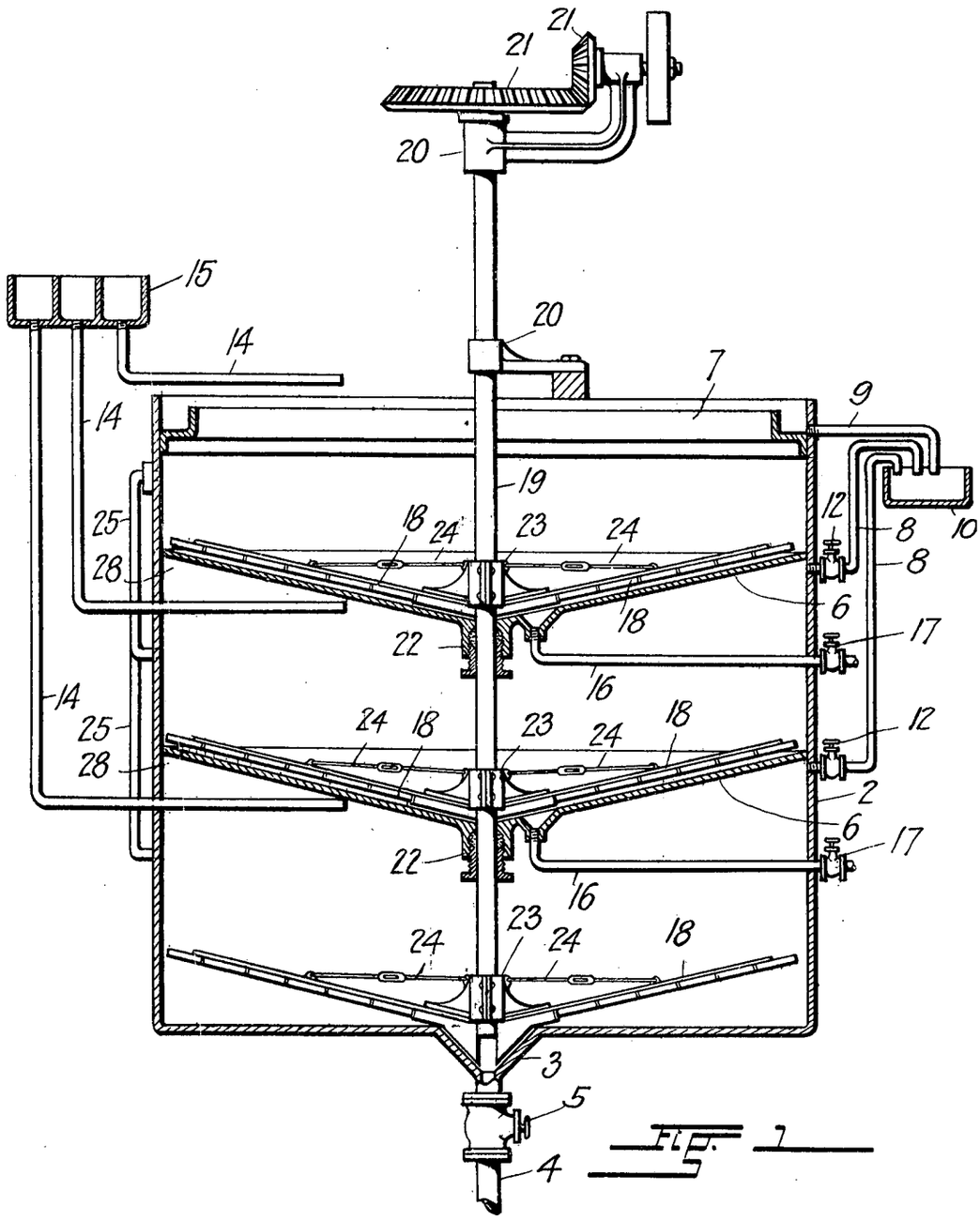
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Fig. 1

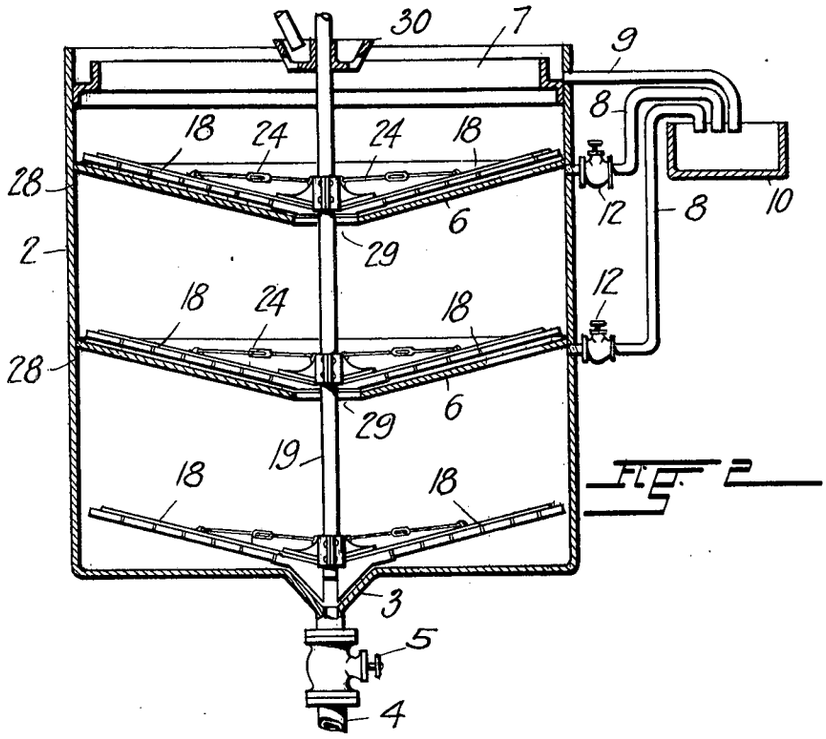
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FIG. 2

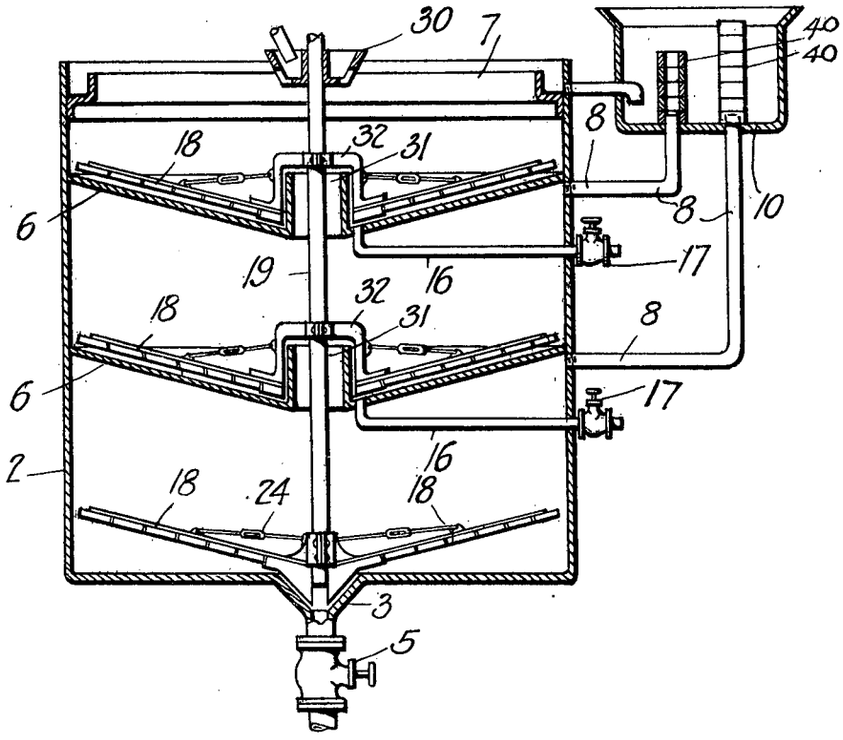
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FIG. 3.

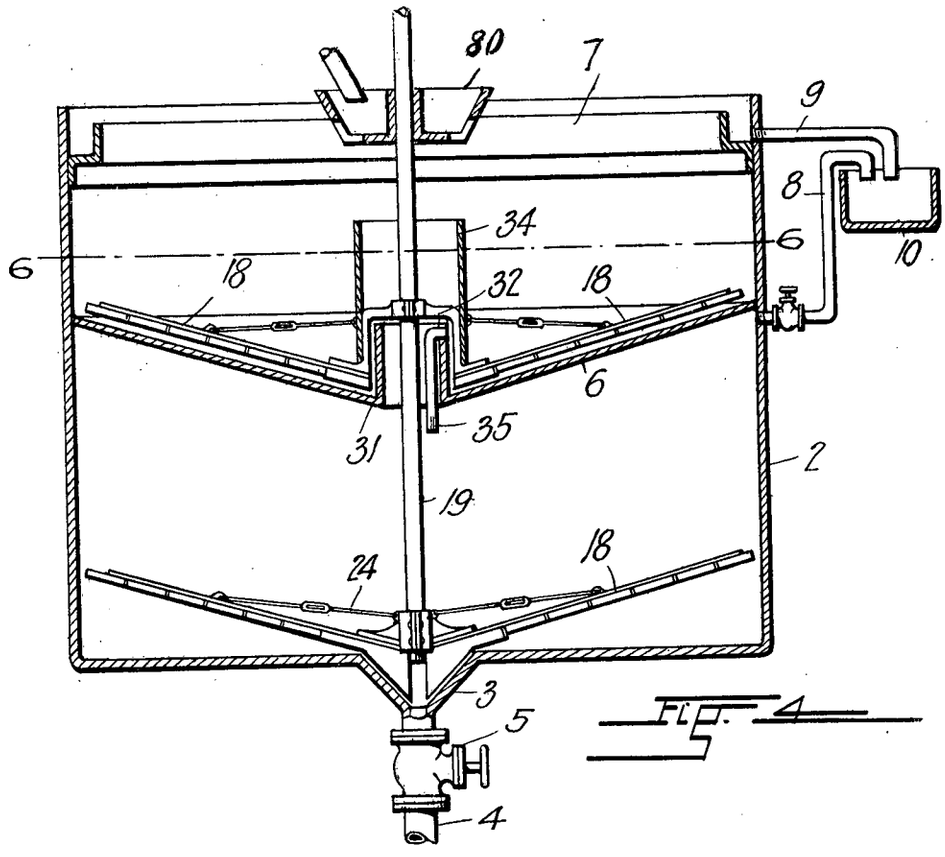


Fig. 4

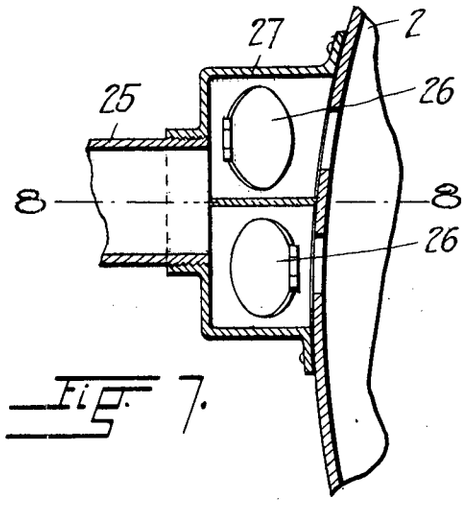


Fig. 7.

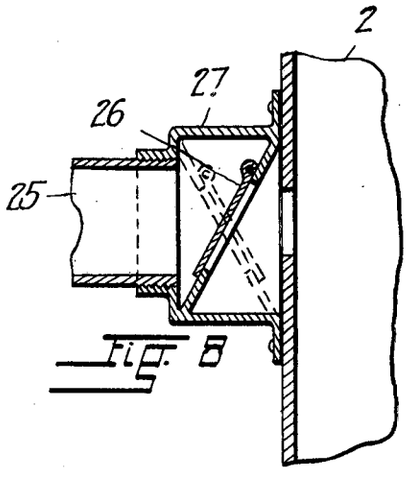


Fig. 8

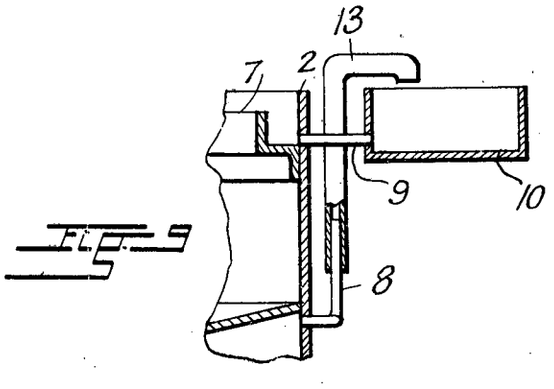


Fig. 9

Fig. 10.

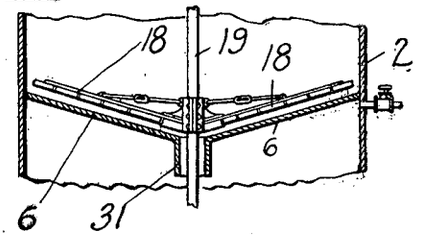
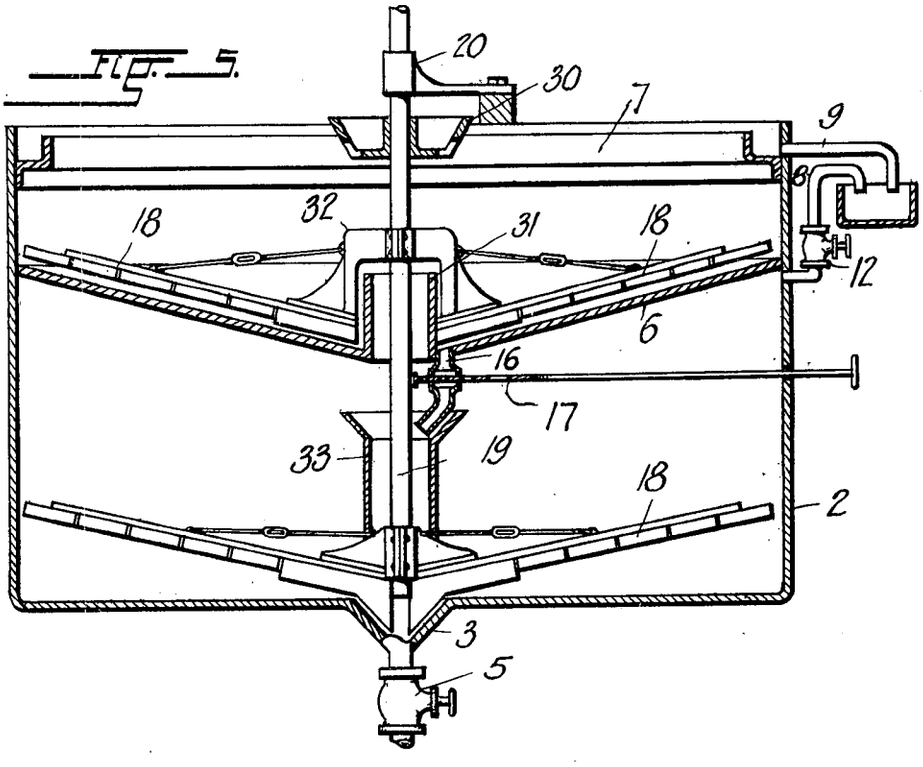


Fig. 5.



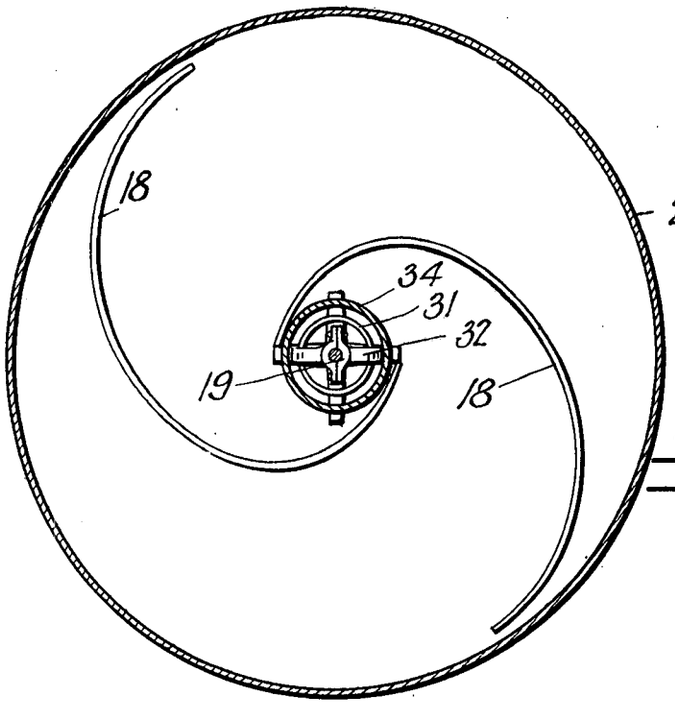


Fig. 6.

Place of payment

COUPON The remitter may write here any communication to the payee

Rs. - - dt. 8 re THE DORR CO. (MYSORE)
No. d/ -
Remitter

(See our letter of date.)

To Branch V for information

15-1-47

COUPON: *The remitter may write here any communication to the payee.*

Re 1.1 Ac = 0. re THE-DOHR CO. (MYSORE).

Application to be filed on 10/10/16 (as per our letters of 23/9/16 and Telex) or as soon as possible thereafter but not earlier.

Remitter

Remitting Bank 9/10 6/10/16

Lo Br V

9-10-16

Respectfully forwarded for approval and favour to the Asstt Secy of State

on 27-1-17

(59

9 OCT 1916

REGISTERED.

To

THE ~~CONTROLLER OF PATENTS~~, SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS,
CALCUTTA BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

DIARY NO. 3296

Dated CALCUTTA, the 6th October 1916.

1916-1917
SIR
SECTION Gen-
FILE NO 306-16
SERIAL NO 2

DEPT. P. FILE LR. M.
FILE INDICATION
Mysore Pats. (Genl)

re THE DORR CO. (MYSORE)

No. *dated* -

With reference to our letter of 23/9/16 forwarding this Application to be filed on 10/10/16 or earliest possible date thereafter, we now remit by Post Office Order the prescribed Fees of Rs. 11/- including Re. 1/- for Stamp Duty on Power of Attorney.

We again request that this Application be granted Filing Date 10/10/16 or the earliest possible Filing Date thereafter but on no account before 10/10/16.

We have the honour to be,

Sir,

Your very obedient servants.

Remfry & Son

P.O.O. :-
Rs 11/-.

11

A.M.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

G. R. S. 26]

G.R. File No. 3.

Serial No.

Diary No. of letter replied to .....

No. 96872

General and Revenue Secretariat

( )

, *the* 191 .

To

Messrs Remfry & Son

Solicitors & Patent Agents, Cale

Date of issue 27.11.16

Signed by Mr. J. Gaynor

Gentlemen,

With reference to your letters of 23rd September and 6th October 1916 forwarding an application of the Dorr Co., of Denver for leave to file a specification of an invention for 'Apparatus for separating liquids from solids in fluid suspensions' and requesting that the application may be filed on 18th Oct 1916 or the earliest possible date thereafter, I am directed to state

P.T.O. over.

SUBJECT.

that, as provided in Section 12(2) of the Mysore Inventions & Designs Regulation XI of 1894, the application has to be dated in the Register of Inventions maintained in this Office as of the date of its receipt viz 27th September 1916.

2. I am also to observe that the in paragraph 1 of the above application it is mentioned that the applicants are the assignees of the said invention, but no deed of assignment has been sent. I am therefore to request that such a deed executed by the Inventor of the invention in favour of the applicants may be obtained & forwarded.

I have &c

25/11/16

For Secy. & Reg.r

List of enclosures

Copied by

Examined by

GPB—20/9 —

4915

To THE ~~CONTROLLER OF PATENTS~~, SECY TO THE GOVT OF MYSORE,
309-16
~~PATENT OFFICE~~, GENL. & REV. DEPTS,
4 ~~CALCUTTA~~. BANGALORE,
MYSORE.

REV. SECT. DEC 1916

FROM REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 1st December 1916.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

re THE DORR CO. (MYSORE)

No. *dated*

With reference to our letters of 23/9/16 & 6/10/16 we are now in receipt of your letter No. G6876/G.M. 309-16-3 dated 27/11/16.

2. A Deed of Assignment from the Inventor has been written for by us and will be forwarded in due course.

3. As regards the Filing Date of the Application we beg to point out that the papers were forwarded under cover of our letter of 23/9/16 with a request that the Application be not filed before 10/10/16 and the statement that the prescribed Fee was not forwarded. On 6/10/16 we wrote in this matter remitting the prescribed Fee which was received by you on 9/10/16. This Application cannot therefore receive a Filing Date earlier than 9/10/16 under Sec. 47(4) of the Mysore Inventions & Designs Regulation No. IX of 1894 and we submit that in view of our specific request that the Application be not filed until 10/10/16 the Mysore Government should receive this

Application

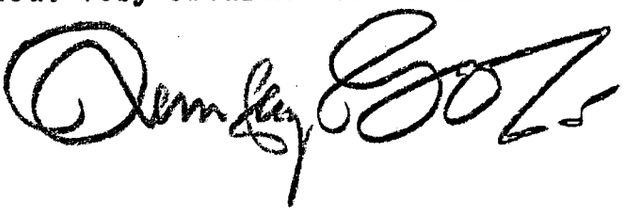
P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

Application as of 10/10/16 and give such Application Filing Date 10/10/16. Should you unable to comply with this very reasonable request, this Application must, under the above quoted Section, bear Filing Date 9/10/16.

We have the honour to be,

Sir,

Your very obedient servants.



A.M.

To

THE ~~CONTROLLER OF PATENTS,~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS.,
~~CALCUTTA.~~ Bangalore,
Mysore.

10 JAN 1917

SECRETARIAT. GENERAL 15 JAN. 1917

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 10th January 1917.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats.(Genl)			

SIR,

DIARY NO. 6184

1916-1917 re THE DORR CO. (MYSORE)
SECTION
FILE NO 309-16
SERIAL NO 5

No. - *dated*

With reference to our letter of 1/12/16, we beg to forward herewith a Deed of Assignment from Alfred Leslie Blomfield, the Inventor in favour of the Applicant Company (consideration 5/-) and solicit the favour of your having such Assignment stamped -/8/-.

2. We trust that this Application has now been granted Filing Date 10/10/16 in accordance with the request contained in our -- letters of 23/9/16, 6/10/16 & 1/12/16. Otherwise such Application will, under Sec. 47(4), receive Filing Date 9/10/16.

3. A Post Office Order for -/8/- is sent today.

We have the honour to be,
Sir,
Your very obedient servants,

Remfry & Co

1 Enclo:-
Asst.

By P.O.O:-
-/8/-.

I.M.B.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

45

2735

G. R. S. 26]

File No. 369-17

Serial No.

Money ordered
Sent today
27-1-17

No. 10192

Diary No. of letter replied to 6184

GEN. & REV. CORRESPONDENCE
CASH SEC.
26 JAN. 1917

General and Revenue Secretariat

( )

, the 191 .

Rs. 1-8-0
on account of
Assignment
abstract.

To

The Supdt. of Stamps & Opium
Abkaree.

Date of issue 25-1-17

Signed by

Has the honor to forward herewith a sum of Rs. 1/8 and a Deed of Assignment executed by Mr. Alfred Leslie Blomfield in favour of Messrs Dorr Co., of Denver and a Power of Attorney executed by the latter Constituting Messrs Remfry & Son, Calcutta, as their agents, in respect of an invention for 'Apparatus for separating liquids from solids in fluid suspensions' and the to request that the Deed of Assignment and the Power of Attorney may

over.

SUBJECT.

may be impressed with the Impress General Stamp of the value of Annas Eight and Rupee one respy and returned to this office.

By order

22/1/17

For Secy to Govt.
Genl. Dept

List of enclosures

Copied by

Examined by

GPB—25,000—4-3-13

G. R. S. 26]

File No. 309-16
Serial No. 1

Diary No. of letter replied to 6184

26 JAN. 1917

No. G 10192 Gen

General and Revenue Secretariat

( )

, the 191 .

To

The I.G. of Education

Date of issue 05.1.17

Signed by

Sir,

I am directed to forward herewith ⊗ an application of the 8th July 1916 of the Dorr Co. of Denver for leave to file a specification of an invention for 'Apparatus for separating liquids from solids in fluid suspensions' and to request that the opinion of Mr. E.P. Metcalfe B.Sc. Professor of Physics, Central College, may be obtained thereon and forwarded to this office.

I have &c

For Secy to Govt., Genl. Dept.

⊗ (to be kindly returned with the reply)

SUBJECT.

DIARY NO. 6712

GEN. & REV. SECRET. V GENERAL 29 JAN. 1917

Stamp 19] 29 JAN 1917 917

19 16-17
SECTION Gen
WD 1865—BPG —400 —14-4-16 FILE NO. 309-16
SERIAL NO 8

No. 13204
Enc. ~~four~~

OFFICE OF THE SUPERINTENDENT OF STAMPS IN MYSORE,
Bangalore, Dated 27 1 191 7.

FROM

N. Krishnaswami Row ESQ., B.A., B.L.,
Superintendent of Stamps in Mysore.

To

D M Narasinga Rao ESQ., BA BL.
Secretary to Government
of Mysore General
Department, Bangalore

SIR,

I have the honor to
return herewith duly
stamped the deed of assign-
-ment and ~~the~~ three Powers of
attorney forwarded with
your docket nos 10192 and
fm 309-16-6
10236 dated 25-ult with
fm 408-16-4
and to request an ack-
-nowledgement.

I have

50

DIARY NO. 6470

1916-17
Exn
309-

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

1. No. 8
2. Date of Remittance 22-1-17
3. From whom received Kerr Reeves & Son Calcutta
4. Date of receipt of amount in the General and Revenue Secretariat 9:10:1916
5. On what account Application fee for leave to file a Specification of an invention by the Dorr Co. of Denver (Petn 309-16
6. Amount (in figures and words) Rs:10/- Rupees ten only
7. The head to which it should be credited. X

(To be filled in by the Treasury.)

22/1/17

for Secretary to Government,
Genl & General Department.

The above amount has been duly received and credited in the Treasury on this date.

Date 22-1-17

Hd. Acctt. *Treasurer.* *Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

GEN. & REV. SECRETARIAT
VERIFIED
22 JAN. 1917

G. R. S. 26]

GEN. & REV. SECRETARIAT. TYPING Sec. 10 FEB 1917

File No. 309

Serial No. 16

Diary No. of letter replied to.....

No. 7 1116

General and Revenue Secretariat

( )

, *the* 191 .

To

The Supdt of Stamps

Date of issue 15. 2. 17

Signed by.....

Has the honor to acknowledge receipt of the documents relating to G.M.F 309-16 & Fin.F 408-16, forwarded duly stamped with your his letter No. 13204 dt 27-1-17.

B.O.

For Secy to Govt
Genl. Depts

over.

SUBJECT.

1917

DIARY NO. 7863

19 | 6 | 19 17
SECTION
FILE NO. 307
SER. 11.

GEN. & REV. SECRETARIAT
GENERAL
5 - MAR. 1917

52

To THE ~~CONTROLLER OF PATENTS~~, SECY TO THE GOVT OF MYSORE
~~PATENT OFFICE~~, GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM
REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 1st March 1917.

SIR,

5 MAR 1917

DEPT.	P.	FILE LR.	M2
FILE INDICATION			
Mysore Pats. (Genl) Mysore Amendment.			

re THE DORR CO. (MYSORE)

No. - *dated* -

With reference to the above Mysore Application, we have received instructions to forward (which we do herewith) amended pages 13 & 14 and to request that such pages may be substituted for pages 13 & 14 in the Application submitted by us, and that leave to file Specification may be granted upon the Application as so amended.

We have the honour to be,

Sir,

Your very obedient servants.

Remfry & Co

1 Enclo :-
Speen Pps. 13 & 14.

A.M.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

53

Edn. 15]

GEN. REV. SECRETARIAT GENERAL 7 - MAR. 1917

From

DIARY NO. 7938

Rao Bahadur M. SHAMA RAO, Esq., M.A.,
Inspector-General of Education in Mysore.

SECTION fm
FILE NO 309-16

To

The Secretary to the Govt. of
H. H. the Maharaja of Mysore,
.....General.....*Dept.*

No. 20514/830

Dated 27th February 1917

Received

No. of Enclosure. 2

Subject.

Submitting a copy of a letter from Mr. E.P. Metcalfe regarding the - - application of the Dorr Co., of Denver.

Edn. 15]

OFFICE OF INSPECTOR-GENERAL OF EDUCATION IN MYSORE

No. 20514 (2) / 830

Bangalore, 27th February *191*7.

6/3/17

From

Rao Bahadur
M. SHAMA RAO, ESQ., M.A.,
Inspector-General of Education in Mysore.

To

.....D.M.Narasinga Rao....Esq., B.A., B.L.,
Secretary to the Govt. of H. H. the Maharaja of Mysore,
.....G e n e r a l.....*Department.*

SIR,

With reference to your letter No.17801/2688 dated 2nd February 1917, I have the honour to forward herewith copy of letter dated the 13th instant ¢ from Mr. E.P. Metcalfe, B.Sc., Professor of Physics, Central College, Bangalore, giving his opinion on the application of the Dorr Co., Denver, for leave to file a specification of an invention for "Apparatus for Separating Liquids from Solids in Fluid Suspensions". The Application is returned herewith.

I have the honour to be,
Sir,
Your most obedient servant,

Assistant to the Inspector General
For Inspector General
(Absent from station)

TNR.

W D—0713—GPB—3,000—8-8-16

Letter dated 13th February 1917 from Mr. E.P. Metcalfe,B.Sc. Professor of Physics, Central College, Bangalore, to the Inspector General of Education in Mysore.

I have the honour to return herewith an application by the Dorr Co., for leave to file a specification for an invention for "Apparatus for separating Liquids from Solids in Fluid Suspensions' In my opinion the device appears to be of a patentable nature; but I give no opinion as to priority.

"Copy"

For Inspector General.

TNR.

56

G. R. S. 26]

GEN. & REV. SECRETARIAT. 1/2 Sec. TYP... 9 MAR 1917

File No.

Serial No.

Diary No. of letter replied to .....

No. G 12319

an application with 4 diagrams and another set of these sheets.

General and Revenue Secretariat

(,)

, the 191 .

To

Messrs Remfry & Son

Solicitors & Patent Agents

Calcutta

Date of issue 13. 3. 17

Signed by Mr Jag Dijan

Gentlemen,

With reference to your letter of 1.3.17, I am directed to state that if as desired the amended pages 13 & 14 received therewith ~~have to be~~ Are substituted for pages 13 & 14 of the application of the Dom Co. of Denver for leave to file a specification of an invention referred to therein forwarded with your letter of 23.9.16

Over. ~~have~~ Certain

SUBJECT.

certain additions & Corrections appear to be necessary to give a Continuity to the application. I am accordingly to return both the application & the amended pages 13 & 14 & to request that a revised application may be forwarded [illegible].

I have &c

List of enclosures

Copied by

Examined by

GPO—2000—10-10-14

GE. L. & REV. SECRE
GENERAL
23 MAR. 1917

To

THE ~~CONTROLLER OF PATENTS,~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

DIARY NO. 8444
FROM
19 -19
SECTION G.M.
FILE NO 309-16
FILE NO 14

FROM

REMERY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 19th March 1917.

DEPT. P. FILE LR. M2.
FILE INDICATION
Mysore Pats. (Genl)
Mysore Amendments.

SIR,

GEN. & REV. SECT.
3 MAR 1917

re THE DORR CO. (MYSORE)

No. *dated*

In reply to your letter No.G 12319/G.M.309-16-13 dated 13/3/17, we beg to resubmit herewith this Mysore Application after inserting pages 13 & 14 therein as we find that our instructions were to insert this addition and that our letter of 1/3/17 should read "and to request that such pages may be inserted before the "Claims in the Application" instead of "such pages may be substi- "tuted for pages 13 & 14 in the Application".

2. We beg to point out that our clients only wish this amendment made in the Application provided it in no way interferes with the Filing Date of the Application.

3. The Filing Date of the Application should be 10/10/16 in accordance with the request contained in our letters of 23/9/16 6/10/16, 1/12/16 & 10/1/17 or, should you be unable to grant Filing Date 10/10/16, under Sec. 47(4) such Filing Date should be 9/10/16.

We have the honour to be,
Sir,
Your very obedient servants.

1 Enclo :-
Amended Appln.

A.M.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

GEN. & REV. SECRETARIAT
TYPING Sec.
3 APR 1917

5 P

G. R. S. 26]

File No. 309-16
Serial No. 15

Diary No. of letter replied to 8444

No. G 13201
ae

General and Revenue Secretariat
( )
, the 191 .

To
The Dy. of Education

Date of issue 9th April 1917.

Signed by Mr. B Seshagirirao

With reference to the Correspondence ending with your letter No. 20574/830 dt 6-3-17 regarding an invention for 'Apparatus for separating liquids from solids in fluid suspensions' by the Dorr Co. of Denver, I am directed to retransmit the application with two new pages No 13 & 14 added to it at the instance of said parties and to request that the further opinion of Mr. E.P. Metcalfe B.Sc., Profr of Physics, Central

Over.

(x) (to be transmitted with the reply)

(x)

SUBJECT.

17

Central College, may be obtained on the application [illegible] forwarded to this office.

Yours &c.,

[illegible]

The Secretary to the Govt.

[illegible]

List of enclosures.

Copied by

Examined by

GPI—20.6 0 —10-10-14

Edn. 15]

From

Rao Bahadur
M. SHAMA RAO, Esq., M.A.,
Inspector-General of Education
in Mysore.

To

The Secretary to the Govt. of
H. H. the Maharaja of Mysore,
.....General.....*Dept.*

No. 10847/847.

Dated 11th October 1917

Received

No. of Enclosure. 3

Subject.

Submitting copy of letter from Mr. E.P. Metcalfe, giving his opinion on certain applications for filing certain specifications and designs.

Edn. 15]

OFFICE OF INSPECTOR-GENERAL OF EDUCATION IN MYSORE

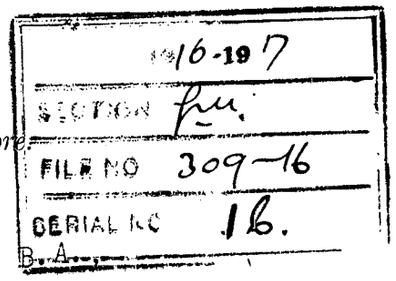
No. 10847/347.
Encls. No. 3

Bangalore 11th October *1917*.

DIARY NO. 3091.

From

Rao Bahadur
M. SHAMA RAO, ESQ., M.A.,
Inspector-General of Education in Mysore.



To

C.S. Balasundaram Iyer ESQ., B.A.,
Secretary to the Govt. of H. H. the Maharaja of Mysore,
GENERAL *Department.*

SIR,

With reference to your letters noted in the margin, requesting that the opinion of Mr. E.P.Metcalfe may be obtained and forwarded regarding - certain specifications and designs as noted therein, I have the honor to forward herewith copy of letter dated 7th September 1917 from Mr. Metcalfe giving his opinion thereon. The applications are herewith returned.

No. G.13701/G.M. 309-16-15 dated 9th April 1917 No. G. 23/G.M. 629-16-3 dated 3rd July 1917 No. G. 945 dated 25th July 1917. 9-2-160-17-2

I have the honor to be,
Sir,
Your most obedient servant,
M. Shama Rao,
INSPECTOR GENERAL.

CS. 13/10.

W D—0713—GPB—3,000—8-8-18

Copy of letter dated 7th September 1917, from Mr. Metcalfe Central College House, Bangalore, to the Inspector General of Education in Mysore, Bangalore.

I have the honor to return herewith 3 patent specifications. My opinion regarding them is as follows:-

(1) DORR CO. OF DENVER.

Jan 309-16

Apparatus for separating liquids from solids in - - fluid suspensions.

This is a revised specification. Permission to file it as revised may be granted.

(2) MARCONI'S WIRELESS TELEGRAPH CO.

Jan 1601-7

Transformers for increasing the frequency of alternating electric currents.

Permission to file may be granted.

(3) JOHN PETERSON OF SEATTLE.

Jan 623-16

Improvements in power developing and transmitting devices.

Permission to file may be granted.

In no case can I give any opinion as regards priority.

"C O P Y"

INSPECTOR GENERAL.

CS. 13/10.

And whereas the applicant has duly complied with all the requirements of Section 5 of the said Regulation;

The Government of Mysore are pleased, under Section 6 of the said Regulation, to authorize the applicant to file a specification of the said invention in accordance with the provisions of the said Regulation.

ORDERED, that the applicant be, and he is hereby, informed accordingly.

By Order of the Government of Mysore,

Draft) 4161

Recd

VB

14/11

For Chief Secretary to the Govt. of Mysore,
~~Gen. and Rev. Depts.~~

Certified that the fees prescribed in the fourth schedule to the Mysore Inventions and Designs Regulation, 1894, in respect of the application for leave to file the said specification and of the filing thereof have been paid by the applicant, and that the specification hereinbefore described has been duly filed in accordance with the provisions of Section 8 of the said Regulation on this the Eighth day of February 1908.

Recd

Chief Secretary to the Govt. of Mysore,
~~Gen. and Rev. Depts.~~

GOVERNMENT OF MYSORE.

General Department

Register No. 1 **of 1916-17**

Bangalore, the ..... 190 .

WHEREAS an application, dated the 8th July 1916 and received on the 9th October 1916, has been submitted under Section 5 of the Mysore Inventions and Designs Regulation, 1894, by The Dorr Company, a Corporation organized under the laws of the State of Delaware and doing business at 1009 Seventeenth street, in the city of Denver, County of Denver, State of Colorado, United States of America, Engineers, (hereinafter referred to as "the applicant") for leave to file a specification of an invention for "Apparatus for separating liquids from solid, in fluid Suspensions".

22/11

2 of 8

6.

G. R. S. VI—G/32]

SUBJECT.....

(x) 17/11

Diary No. of letter replied to.....

Section Gen.

File No. 309-16

Serial No. 17 ;8

GENERAL AND REVENUE SECRETARIAT,

( )

, the 191 .

No. G 6917 Cir

Date of issue 24. 11. 17

To

Messrs Remfry & Sun,

Signed by Mr JE Atkinson

Solicitors, Patent Agents, Calcutta

Gentlemen,

With reference to the correspondence ending with your letter dt 15th March 1917 I am directed to forward herewith G.O. No. G 6913 dt 24. 11. 17 authorizing the Dorr Co. of Denver to file a specification of their invention for "Apparatus for separating liquids from solids in fluid suspensions" and to

Over.

24/11/17

request that the fact may be Communi-
cated to the parties Concerned.

WO 16.11

I have &c
W. H. [illegible]
for Chief Sec

List of enclosure

Copied by

Examined by

WD 86—GPB—60,000—15-11 16

68

4596

REGISTERED. Sm 309-13

To

THE ~~CONTROLLER OF PATENTS,~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE~~, GENL & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 15th December 1917.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats.(Genl)			

SIR,

983

re THE DORR CO. (MYSORE)

No. 1/16-17 dated -

Pursuant to the Order granting leave in this matter dated 24th November 1917, Register No.1 of 1916-17, we have the honour to forward herewith 4 copies of the Specification of THE DORR COMPANY, a Corporation organized under the Laws of the State of Delaware and doing business at 1009 Seventeenth Street, in the City of Denver, County of Denver, State of Colorado, United States of America, Engineers, in respect of their Invention for "APPARA-"TUS FOR SEPARATING LIQUIDS FROM SOLIDS IN FLUID SUSPENSIONS".

The abovementioned Order is enclosed and we solicit the favour of your filling in the Certificate at foot thereof and having same signed.

A Post Office Order for Rs. 30/- is sent today.

We have the honour to name our Office in Calcutta to the Address for Service under the Act.

We have the honour to be,
Sir,
Your very obedient servants,

Remfry & Son

Part of P.O.O.for Rs.90/-.

Enclos:-
4 Specns.
Order.

I.M.B.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

G. R. S. Vl—G/32]

SUBJECT.....

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Diary No. of letter replied to.....

GENERAL AND REVENUE SECRETARIAT

( )

, the 191

Date of issue 31.1.18

Signed by M.T.S.J.Gr

Section Inv

File No. 309-16

Serial No. 26

No. G 8982

To

Messrs Remfry & Son, Calcutta

Gentlemen,

With reference to your three letters of 15-12-17 regarding the filing of the Specifications of inventions No. 104(8) of 1916-17 & (No. 2 of 1917-18,) I am directed to inform you that the fee said to have been remitted in respect of each of the three cases has not been received yet.

I have &c

Intd. T.S.J

for Chief Secy to Govt.

Inv 309-16

5277 20

To

THE ~~CONTROLLER OF PATENTS,~~ SECY. TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Fee 30/- 16-91

Dated CALCUTTA, the 7th January 1918.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

re THE DORR CO. (MYSORE)

No. 1/16-17 *dated*

RECD 9 JAN 1918

2973

With reference to your letter No. G8982/G.M. 160-17-11 we beg to inform you that the prescribed Fee of Rs 30/- for filing Specifications in this matter was remitted by us by part of Money Order No. 6708 dated 15/12/17 for Rs 90/- and we presume that such Money Order has been duly paid to you.

We beg, however, having enquiries instituted in the matter and will report result of such enquiries in due course.

We have the honour to be,

Sir,

Your very obedient servants.

Remfry & Co.

A.M.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

G. R. S. VI—G/32]

SUBJECT.....

.....

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Diary No. of letter replied to.....

Section [illegible]

File No. 3 of [illegible]

Serial No. 1 2

GENERAL AND REVENUE SECRETARIAT

( )

, the *191*

No. G. 10408

Date of issue 29.1.18

To

Messrs Remfry & Son, Calcutta

Signed by Mr. J.E.J. Ryder

Gentlemen,

With reference to the correspondence ending with your letter of 7th January '18 intimating that the fee of Rs. 90/- for filing the Specifications of inventions Nos. 1 & (8) of 1916-17 & (No. 2 of 1917-18) was remitted by money order No. 6708 of 15-12-17, I am directed to state that the said money order has not yet been received in this office and

over. that

fin. 309-16

[illegible] enclosures from the
[illegible] The
[illegible]
[illegible] seen received in this office

Page 42
[illegible]
[illegible]

List of enclosures.

Copied by

Examined by

W D86—GPB 60,000—15-11 16

REGISTERED. DIARY NO. 6261.

To

THE ~~CONTROLLER OF PATENTS.~~ SECY TO THE GOVT. OF MYSORE,
PATENT OFFICE, GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Fin. 309 16-23

Dated CALCUTTA, the 4th February 1918.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

re THE ~~ZENITH~~ CO. (MYSORE)

No. 1/16-17 *dated*

8 FEB 1918 6532

Referring to your letter No.G 10408/G.M.160-17-13 dated 29/1/18, we note that the Money Order No. 6708 for Rs 90/-/- despatched by us on 15/12/17 has not yet been paid and are addressing the Presidency Post-Master, Calcutta, on the subject. In the meantime we beg to send you a fresh Post Office Order for Rs 90/-/- covering the amount of the prescribed Fee of Rs 30/-/- for filing Specifications in this matter.

In view of the fact that we duly despatched the Specifications in this matter with a remittance for the prescribed Fee on 15/12/17, we trust that you will treat such Specifications as filed on the date upon which such Specifications were received by you, i.e., on or about 18/12/17.

We have the honour to be,

Sir,

Your very obedient servants.

P.O.O. for Rs 90/-.
A.M.

385

No. G 11872 / 5 / 6

Gm 309-16-24

MYSORE GOVT, GEN. & REV. SECRETARIAT,

Dated Bangalore, 26-2 190

NOTIFICATION.

(PATENT.)

The following specification of an invention has been filed in accordance with Sections 8, 9, 10 and 11 of Regulation XI of 1894 (The Inventions and Designs Regulations) and is open to inspection at the Mysore Government Secretariat on application to the Chief Secretary to the Government of His Highness the Maharaja of Mysore, ~~General and Revenue Departments~~, and on payment of a fee of one Rupee.

By The Dorr Company, a Corporation organized under the laws of the State of Delaware and doing business at 1009, Seventeenth Street in the city of Denver, County of Denver, State of Colorado, United States of America, Engineers.

"Apparatus for separating liquids from solids in fluid suspensions"

By Order,

To

The Compiler, *Mysore Gazette*, for publication.

Chief Secretary.

G. R. S. VI—s-v/18

DRAFT.

SUBJECT.....

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No.

Section. Gen
File No. 309-16
Serial No. 25

Diary No. of letter replied to.....

GENERAL AND REVENUE SECRETARIAT
( )
, *the*.....*191*

Date of issue 26-2-18

Signed by.....

No 9 11878
of 1918

To Messrs Remfry & Son
Solicitors & Patent Agents,
Calcutta

Gentlemen,
~~Sir,~~

With reference to your letter dated 8th Feb 1918 I am directed to forward copy of a Notification No. 9 dated 23. 2. 18 issued by this Government in regard to the invention filed by you under Regulation XI of 1894 (The Inventions and Designs Regulations.)

The order granting permission to file specification is herewith returned, with the certificate at foot, duly filled in and signed.

I have, etc.,

11/17/2 18

Secretary to Government.

G. R. S. VI.—s-v/12]

3 of 5

DRAFT.

SUBJECT... 3 ...

.....

.....

Section. 8m
File No. 309-16
Serial No. 26

Diary No. of letter replied to.....

No. G 11874-6
ans
to

GENERAL AND REVENUE SECRETARIAT,
( )
the.....*191* .

(1) *The Superintendent, Govt. Museum.*
(2) *The Chief Engineer of Mysore.*
(3) Dy. Director of Education

Date of issue 26.2.17

Signed by [illegible]

Has the honor to forward herewith for record in his office copy of a specification of an invention for "Apparatus for separating liquids from solids in fluid dispersions" filed by the Dorr Company of Denver.

By Order,

[illegible]

for Chief Secretary to Government.

Pl. ic.

6774 77

Qm 309-16-27.

To

THE ~~CONTROLLER OF PATENTS~~, SECY TO THE GOVT. OF MYSORE,
~~PATENT OFFICE~~, GENL. & REV. DEPTS,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

REV. SECRET. GENERAL 25 FEB. 1918

Dated CALCUTTA, the 20th February 1918.

DEPT.	P.	FILE LR.	M.
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

25 FEB 1918

8596

re THE DORR CO. (MYSORE)

No. 1/16-17 *dated* -

Referring to our letter of 4/2/18, we would again earnestly request that the Specifications in this matter should be accorded filing date 18/12/17 being the date upon which the Specifications were received in your office and the prescribed Fee should have been received on the same date but for delay due to the Post Office and not to any default on the part of the Applicant Company or their Agents.

We have the honour to be,

Sir,

Your very obedient servants.

Remfry & Son

A.M.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

Diary 6-734 18

Gm 309-16-28.

GENERAL 1 MAR 1918

To

THE ~~CONTROLLER OF PATENTS,~~ SECY TO THE GOVT OF MYSORE,
~~PATENT OFFICE,~~ GENL. & REV. DEPTS.,
~~CALCUTTA.~~ BANGALORE,
MYSORE.

FROM

REMFRY & SON,
SOLICITORS AND PATENT AGENTS,
CALCUTTA.

Dated CALCUTTA, the 28th February 1918.

DEPT.	P.	FILE LR.	1
FILE INDICATION			
Mysore Pats. (Genl)			

SIR,

1 MAR 1918

9140 *re* THE DORR CO. (MYSORE)

No. 1/16-17 *dated* -

Referring to our letter of 20/2/18 we now beg to enclose herewith a copy of a special Certificate from the Presidency Postmaster, Calcutta, dated 23/2/18 certifying that the sum of Rs. 90/- (which included the prescribed Fee for filing Specifications in this matter) was remitted to you by us on 15/12/17 and that the default in payment to you was not due to any fault on our part.

We, therefore, trust you will kindly grant these Specifications filing date 18/12/17.

We have the honour to be,

Sir,

Your very obedient servants,

Remfry & Co.

1 Enclo:-
c/Cert.

I.M.B.

P/O (Genl.) 1,000—4-2-14. [1,000—17-3-11]

C O P Y.

P O S T O F F I C E.

OFFICE of the Presidency Postmaster.

No. MO1-1588.

Dated Calcutta the 23rd February 1918.

Certified that a money order for Rs. 90/- (Rupees ninety only) was issued on the 15th December, 1917, under receipt No.6708 of the Calcutta General Post Office payable to the Secretary to the Government of Mysore, General & Revenue Department, Bangalore, remitted by Messrs Remfry & Son but its value was not paid to the payee by the 6th January, 1918 owing to the loss of the original money order in course of transit. The delay in payment was not due to any fault on the part of the remitter.

(Sd)

for Presidency Postmaster.

Fm 309-16 & 28(a) 7023

Duplicate.

(To be returned to the General and Revenue Secretariat for being placed in the file.)

GENERAL & REVENUE SECRETARIAT 4 MAR 1918

1. No. 87

2. Date of Remittance 1-3-18

3. From whom received Messrs Remfry & Sun Calcutta

4. Date of receipt of amount in the General and Revenue Secretariat 8-2-18

5. On what account Fee for filing a specification of invention No. 1 of 1916 of the Dow Co. of Denver (Fm 309-16)

6. Amount (in figures and words) Rs. 30/- Rupees thirty only

7. The head to which it should be credited.

(To be filled in by the Treasury)

for Chief *Secretary to Government,*
~~General Department.~~

GENERAL & REVENUE SECRETARIAT 4 MAR 1918

The above amount has been duly received and credited in the Treasury on this date.

Date 4/3/18

Hd. Acctt. *Treasurer.* *Sr. Try. Officer.*

N. B.—Both the counterfoil and the duplicate to be returned to the General and Revenue Secretariat duly signed by the Treasury Department.

G. R. S. VI—G/32]

SUBJECT.....

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Diary No. of letter replied to.....

Section G: m
File No. 309-16
Serial No. 29

GENERAL AND REVENUE SECRETARIAT,
( )
, *the* 191 .

No. G. 13920

Date of issue 7. 4. 1918 To

Messrs Remfry & Son, Calcutta

Signed by for Secy

Gentlemen,

With reference to your letter of 25th February 1918, I am directed to state that, under Section 47(a) of the Mysore Inventions & Designs Regulation XI of 1894, ~~the~~ the date on which the fees in respect of filing the Specifications of in No. 1 of 1916-17 of the Dorr Comp were received in this office on 8th February 1[illegible]

Over.

has been treated as the filing date
and that you request that the
Specification may be ~~granted~~ considered as having been
~~filed~~ filed on the 17th Dec 17
the date on which the copies ~~of~~ thereof
were received in this office is inadmissible
under the rules.

W 7/2/21

Yours &c
W. T. [illegible]
For Chief Asst to Supt.

Kindly

B

List of enclosure

Copied by

Examined by

WD 86—GPB—60,000—15-11 16